

AMENDMENTS TO THE CLAIMS

1. - 79. (Canceled)

80. (New) A method for managing addresses by a module in a communication system having a plurality of interconnected modules, the method comprising:

maintaining an address database comprising a locally owned address entry and a remotely owned address entry;

monitoring a status for the locally owned address entry in the address database;

maintaining the locally owned address entry in the address database based upon the status for the locally owned address entry determined by the module;

providing the status for the locally owned address entries to another interconnected module;

receiving the status for the remotely owned address entry from another interconnected module; and

maintaining the remotely owned address entry in the address database based upon the status of the remotely owned address entry provided by another interconnected module associated with the remotely owned address entry.

81. (New) The method in accordance with Claim 80 wherein

monitoring the status for the locally owned address entry comprises detecting a new locally owned address;

maintaining the locally owned address entry comprises adding a locally owned address entry for the new locally owned address to the address database; and

providing the status for the locally owned address entry to another interconnected module comprises transmitting a control message to the another interconnected module including the new locally owned address.

82. (New) The method in accordance with Claim 80 wherein:

receiving the status for the remotely owned address entry comprises receiving a control message from the another interconnected module including an address and a module identifier;

and

maintaining the remotely owned address entry comprises adding a remotely owned address entry for the address to the address database.

83. (New) The method in accordance with Claim 80 wherein:

monitoring the status for the locally owned address entry comprises determining that the locally owned address entry is obsolete;

maintaining the locally owned address entry comprises purging the obsolete locally owned address entry from the address database; and

providing the status for the locally owned address entry to the another interconnected module comprises transmitting a purge message to the another interconnected module including the address from the obsolete locally owned address entry.

84. (New) The method in accordance with Claim 80 wherein:

receiving the status for the remotely owned address entry comprises receiving a purge message from the another interconnected module including an address associated with an obsolete remotely owned address entry; and

maintaining the remotely owned address entry comprises purging the obsolete remotely owned address entry from the address database.

85. (New) The method in accordance with Claim 80 further comprising:

reconfiguring the module to operate in a stand-alone mode; and

purging all remotely owned address entries from the address database upon reconfiguring the module to operate in the stand-alone mode.

86. (New) The method in accordance with Claim 80 further comprising:
determining that one of the interconnected modules has been removed; and
purging all remotely owned address entries associated with the removed module from
the address database.

87. (New) A module for managing addresses in a communication system having a plurality of interconnected modules, the method comprising:

means for maintaining an address database comprising a locally owned address entry and a remotely owned address entry;

means for monitoring a status for the locally owned address entry in the address database;

means for maintaining the locally owned address entry in the address database based upon the status for the locally owned address entry determined by the module;

means for providing the status for the locally owned address entries to another interconnected module;

means for receiving the status for the remotely owned address entry from another interconnected module; and

means for maintaining the remotely owned address entry in the address database based upon the status of the remotely owned address entry provided by another interconnected module associated with the remotely owned address entry.

88. (New) The module in accordance with Claim 87 wherein:

the means for monitoring the status for the locally owned address entry comprises means for detecting a new locally owned address;

the means for maintaining the locally owned address entry comprises means for adding a locally owned address entry for the new locally owned address to the address database; and

the means for providing the status for the locally owned address entry to another interconnected module comprises means for transmitting a control message to the another interconnected module including the new locally owned address.

89. (New) The module in accordance with Claim 87 wherein:

the means for receiving the status for the remotely owned address entry comprises means for receiving a control message from the another interconnected module including an address and a module identifier; and

the means for maintaining the remotely owned address entry comprises adding a remotely owned address entry for the address to the address database.

90. (New) The module in accordance with Claim 87 wherein:

the means for monitoring the status for the locally owned address entry comprises means for determining that the locally owned address entry is obsolete;

the means for maintaining the locally owned address entry comprises means for purging the obsolete locally owned address entry from the address database; and

the means for providing the status for the locally owned address entry to the another interconnected module comprises means for transmitting a purge message to the another interconnected module including the address from the obsolete locally owned address entry.

91. (New) The module in accordance with Claim 87 wherein:

the means for receiving the status for the remotely owned address entry comprises means for receiving a purge message from the another interconnected module including an address associated with an obsolete remotely owned address entry; and

the means for maintaining the remotely owned address entry comprises means for purging the obsolete remotely owned address entry from the address database.

92. (New) The module in accordance with Claim 87 further comprising:

means for reconfiguring the module to operate in a stand-alone mode; and

means for purging all remotely owned address entries from the address database upon reconfiguring the module to operate in the stand-alone mode.

93. (New) The module in accordance with Claim 87 further comprising:

means for determining that one of the interconnected modules has been removed; and

means for purging all remotely owned address entries associated with the removed

module from the address database.

94. (New) A method for managing addresses by a module in a communication system having a plurality of interconnected modules, the method comprising:

receiving a data packet from a first communication device, the data packet having a source address;

adding an address entry associated with the source address as a locally owned address entry to an address database maintained by the module;

transmitting a control message comprising the source address to another interconnected module for adding a corresponding remotely owned address entry associated with the source address to an address database maintained by the another interconnected module;

determining that the locally owned address entry is obsolete;

purging the locally owned address entry from the address database maintained by the module; and

transmitting a purge message comprising the source address to the another interconnected module for purging the remotely owned address entry associated with the source address from the address database maintained by the another interconnected module.

95. (New) The method in accordance with Claim 94 wherein the control message further comprises a module identifier identifying the module.

96. (New) The method in accordance with Claim 94 further comprising:

adding a remotely owned address entry to the address database maintained by the module in response to receiving a control message from another interconnected module, the control message received from another interconnected module comprising a source address of a second communication device;

purging the remotely owned address entry in the address database maintained by the module in response to receiving a purge message from the another interconnected module.

97. (New) The method in accordance with Claim 94 wherein the determining that the locally owned address entry is obsolete is based upon performing an aging function.